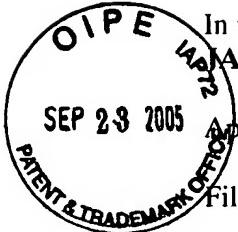


IPW

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**



In re Application of  
MAEHNE et al.  
Application No.: 10/813,954

Filed: March 31, 2004

Title: **NOVEL DIPHENYLAZETIDINONE WITH  
IMPROVED PHYSIOLOGICAL  
PROPERTIES, PROCESS FOR ITS  
PREPARATION, MEDICAMENTS  
COMPRISING THIS COMPOUND,  
AND ITS USE**

Examiner: BERCH, Mark L.  
Art Unit: 1614

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on

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UNDER 37 C.F.R. 1.56, 1.97 AND 1.98**

Commissioner for Patents  
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Applicants submit herewith patents, publications, and other information of which they are aware, which they believe may be material, as defined in 37 C.F.R. 1.56(b), to the examination of this application and in respect of which there may be a duty to disclose in accordance with 37 C.F.R. 1.56(a). While the information referred to in this Information Disclosure Statement may be material pursuant to 37 C.F.R. 1.56(b), the filing of this Information Disclosure Statement is not intended to, pursuant to 37 C.F.R. 1.97(h), constitute an admission that any patent, publication or other information referred to is, or is considered to be, material to the patentability of this invention. Pursuant to 37 C.F.R. 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information exists.

- (a) This Information Disclosure Statement is filed within the period set forth in §1.97(b) because it accompanies the new patent application submitted herewith, is filed within three months of the filing date of a national application or within three months of the date of entry of the national stage as set forth in §1.491 in an international application, or is believed to be filed before the mailing date of a first Office Action on the merits, or before the mailing of a first office action after the filing of a request for continued examination under §1.114 whichever event occurs last. However, in the event that the first office action has been mailed, the Commissioner is authorized to charge any fees under 37 C.F.R. 1.17(p) or credit any overpayment to Account No. 18-1982.

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Respectfully submitted,



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Barbara E. Kurys, Reg. No., 34,650  
Attorney/Agent for Applicant

Aventis Pharmaceuticals Inc.  
Patent Department  
Route #202-206 / P.O. Box 6800  
Bridgewater, NJ 08807-0800  
Telephone (908) 231-**2965**  
Telefax (908) 231-2626  
Aventis Docket No. DEAV2003/0028 US NP

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|  |   |    |   | Filing Date              | 03-31-2004              |
|  |   |    |   | First Named Inventor     | JAEHNE et al.           |
|  |   |    |   | Group Art Unit           | 1614                    |
|  |   |    |   | Examiner Name            | BERCH Mark L.           |
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|                          |                       | EP                      | 0 656 354           |                                   | BARTH, et al.                                   | 06-04-1997                                       |   |                |
|                          |                       | EP                      | 0462884             |                                   | VINCENT, et. al.                                | 06-16-1993                                       |   |                |
|                          |                       | WO                      | 02/44150            |                                   | BOKOTEY, et al.                                 | 06-06-2002                                       |   |                |
|                          |                       | WO                      | 00/34331            |                                   | DONG, et. al.                                   | 06-15-2000                                       |   |                |
|                          |                       | WO                      | 00/40569            |                                   | HODSON, et. al.                                 | 07-13-2000                                       |   |                |
|                          |                       | WO                      | 00/64876            |                                   | JAYYOSI, et. al.                                | 11-02-2000                                       |   |                |
|                          |                       | WO                      | 00/64888            |                                   | JAYYOSI, et. al.                                | 11-02-2000                                       |   |                |
|                          |                       | WO                      | 00/71549            |                                   | BROUGH et al                                    | 11-30-2000                                       |   |                |
|                          |                       | WO                      | 00/78312            |                                   | SAHOO, et. al.                                  | 12-28-2000                                       |   |                |
|                          |                       | WO                      | 01/04156            |                                   | LARSEN, et al.                                  | 01-18-2001                                       |   |                |

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|  |   |    |   | <b>Filing Date</b>            | 03-31-2004              |
|  |   |    |   | <b>First Named Inventor</b>   | JAEHNE et al.           |
|  |   |    |   | <b>Group Art Unit</b>         | 1614                    |
|  |   |    |   | <b>Examiner Name</b>          | BERCH Mark L.           |
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|                    |                       | WO                      | 01/09111            |                                   | BRINER, et. al.                                 | 02-08-2001                                       |   |                |
|                    |                       | WO                      | 01/62266            |                                   | CARR  | 08-30-2001                                       |   |                |
|                    |                       | WO                      | 01/83451            |                                   | IKUTA et al                                     | 11-08-2001                                       |   |                |
|                    |                       | WO                      | 01/85695            |                                   | LI, et. al.                                     | 11-15-2001                                       |   |                |
|                    |                       | WO                      | 01/90094            |                                   | BARF, et al.                                    | 11-29-2001                                       |   |                |
|                    |                       | WO                      | 02/50027            |                                   | GLOMBIK   | 06-27-2002                                       |   |                |
|                    |                       | WO                      | 03/015769           |                                   | SCHWINK   | 02-27-2003                                       |   |                |
|                    |                       | WO                      | 97/26265            |                                   | NIELSEN et al                                   | 07-24-1997                                       |   |                |
|                    |                       | WO                      | 98/08871            |                                   | KNUDSEN, et. al.                                | 03-05-1998                                       |   |                |
|                    |                       | WO                      | 99/03861            |                                   | NIELSEN et al                                   | 01-28-1999                                       |   |                |

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|  |                       | ASAKAWA A. et al., Cocaine-Amphetamine-Regulated Transcript Influences Energy Metabolism, Anxiety and Gastic Emptying in Mice, Hormone and Metabolic Research, (2001) Vol. 33, No. 9, pp. 554 - 558  |  |
|  |                       | BARF Tjeerd et al., Arylsulfonamidothiazoles as a New Class of Potential Antidiabetic Drugs. Discovery of Potent and Selective Inhibitors of the 11 Beta-Hydroxysteroid Dehydrogenase Type 1, American Chemical Society, (2002), Vol. 45, No. 18, pp. 3813 - 3815                        |  |
|  |                       | ISHIHARA Kazuaki et al., 3,4,5-Trifluorobenzeneboronic Acid as an Extremely Active Amidation Catalyst, J. Org. Chem., (1996), Vol. 61, pp. 4196 - 4197   |  |
|  |                       | KLAUSNER Yakir S. et al., Coupling Reagents in Peptide Synthesis   |  |
|  |                       | KUNISHIMA Munetaka et al., 4-(4,6-Dimethoxy-1,3,5-triazin-2-yl)-4-methyl-morpholinium Chloride: An Efficient Condensing Agent Leading to the Formation of Amides and Esters, Tetrahedron, (1999), Vol. 55, pp. 13159 - 13170   |  |
|  |                       | LAROCK, R.C., Interconversion of Nitriles, Carboxylic Acids and Derivatives, Comprehensive Organic Transformations: A Guide to Functional Group Preparations, VCH Publishers, New York, Weinheim; 1999; pp.1929-1930.  |  |
|  |                       | LEE Daniel W. et al., Leptin Agonists as a Potential Approach to the Treatment of Obesity, Drugs of the Future, (2001), Vol. 26, No. 9, pp. 873 - 881  |  |
|  |                       | OKADA H. et al., Synthesis and Antitumor Activities of Prodrugs of Benzoylphenylureas, Chem. Pharm. Bull., (1994), Vol. 42, No. 1, pp. 57 - 61   |  |
|  |                       | SALVADOR Javier et al., Perspectives In The Therapeutic Use Of Leptin, Expert Opinion Pharmacotherapy, (2001), Vol. 2, No. 10, pp. 1615 - 1622   |  |
|  |                       | SPEICHER A. et al., O-(1-Benzotriazolyl)-N,N,N,N,-tetramethyluroniumhexafluorophosphat (HBTU) und O-(7-Aza-1-benzotriazolyl)-N,N,N,N -tetramethyluroniumhexafluorophosphat (HATU) -zwei moderne Kupplungsreagenzien zur Peptidsynthese, J. prakt. Chem., (1998), Vol. 340, pp. 581 - 583 |  |

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